

U.S. Patent Application Serial No. 10/050,170
Response dated November 24, 2003
Reply to OA of May 30, 2003

IN THE CLAIMS

Please add new claims 11-13 and amend claims 9 and 10 as follows:

1. (Original): A rubber stopper used in a waterproof connector, the rubber stopper disposed between a covered cable and a connector housing of the waterproof connector, characterized in that the rubber stopper includes a material that can bond the rubber stopper to a covering layer of the covered cable when the rubber stopper is heated.

2. (Previously Presented): The rubber stopper set forth in claim 1 wherein the material bonding the covering layer to the rubber stopper is an oleo-rubber that includes an organic rubber as a major constituent and at least one of di-2-ethylhexyl phthalate and a high-grade alcohol phthalate.

3. (Original): The rubber stopper set forth in claim 1 wherein the material bonding the covering layer to the rubber stopper is an oleo-rubber that includes a compound comprising at least one of silyldiene groups.

4. (Original): The rubber stopper set forth in claim 1 wherein a heating temperature during the heating is higher than a temperature at which the rubber stopper is assembled in the connector.

U.S. Patent Application Serial No. **10/050,170**

Response dated November 24, 2003

Reply to OA of **May 30, 2003**

5. (Previously Presented): A waterproof connector having a waterproof rubber stopper that includes an organic rubber as a major constituent, the rubber stopper disposed between the waterproof connector and a covered cable, wherein the rubber stopper includes a plasticizer soluble mutually with a resin material constituting a covering layer of the covered cable,

wherein the plasticizer is a di-2-ethylhexyl phthalate or a phthalic acid di-isodecyl.

6. (Canceled).

7. (Original): A waterproof connector having a waterproof rubber stopper that includes a silicon rubber as a major constituent, the rubber stopper disposed between the waterproof connector and a covered cable, wherein the rubber stopper includes a bonding agent to bond a covering layer of the covered cable to the rubber stopper when the rubber stopper is heated.

8. (Original): The waterproof connector set forth in claim 7 wherein the bonding agent is a straight-chain organosiloxane oligomer of a p-phenylene construction or a cyclic organosiloxane oligomer.

U.S. Patent Application Serial No. 10/050,170
Response dated November 24, 2003
Reply to OA of May 30, 2003

9. (Currently Amended): The rubber stopper set forth in claim 1 wherein the rubber stopper is bonded to the covering layer of the covered cable when the rubber stopper is heated by an environmental air surrounding the connector during a using state of the connector ~~the heating of the stopper is achieved by a thermal history in use of the rubber stopper.~~

10. (Currently Amended): The waterproof connector set forth in claim 7 wherein the rubber stopper is bonded to the covering layer of the covered cable when the rubber stopper is heated by an environmental air surrounding the connector during a using state of the connector ~~the heating of the rubber stopper is achieved by a thermal history in use of the rubber stopper.~~

11. (New): The rubber stopper set forth in claim 1 wherein the covering layer of the covered cable includes a vinyl chloride resin or a polyvinyl chloride resin.

12. (New): The waterproof connector set forth in claim 5 wherein the covering layer of the covered cable includes a vinyl chloride resin or a polyvinyl chloride resin.

13. (New): The waterproof connector set forth in claim 7 wherein the covering layer of the covered cable includes a vinyl chloride resin or a polyvinyl chloride resin.